

# MEMORANDUM

CH2M HILL

TO: Doug Liden/USEPA

COPIES: Pat Young/USEPA  
Sheila Wiegman/ASEPA  
Norman Wei/StarKist Seafood  
James Cox/Van Camp Seafood  
Maurice Callaghan/StarKist Samoa  
Michael Macready/VCS Samoa Packing

FROM: Steve Costa/CH2M HILL

DATE: 22 April 1992

SUBJECT: Comments on Draft NPDES Permits for Pago Pago Joint Cannery Outfall Operation

PROJECT: PDX30702.PA.NP

## PURPOSE AND SCOPE OF COMMENTS

The draft NPDES permits for StarKist Samoa, Inc. (AS0000019) and VCS Samoa Packing Company (AS0000027) have been reviewed by Mr. Norman Wei of StarKist Seafood, Mr. James Cox of Van Camp Seafood, and Dr. Steven Costa of CH2M HILL. CH2M HILL is the canneries' consultant for permitting and environmental issues associated with the Joint Cannery Outfall in Pago Pago Harbor, American Samoa. This memorandum presents the comments of the canneries on the terms and conditions of the draft NPDES permits for discharge through the Joint Cannery Outfall.

## COMMENTS ON SECTION A. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

*Monitoring for TP and TN.* The monitoring schedule for TP and TN required for the option of counting non-production days requires monitoring for seven consecutive days (six days following the monitoring for a non-production day). The Statement of Basis indicates that the EPA suggested monitoring schedule "will ensure that the monitoring is representative of the discharge". We recognize that this is intended to be a conservative approach to protect water quality standards. However, we request the following points be considered:

- The approach used in the formulation and definition of the mixing zone was quite conservative.

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- A review of the frequency distribution of TN and TP loadings shows a distribution skewed toward the high end. This means that an abbreviated sampling schedule (for example 40 percent of both production and non-production days) would be more likely to over estimate loading and would actually be more conservative (over the long term) than sampling every day.
- The cost of sampling additional days is significant (estimated to be approximately \$30,000 per year for each cannery).

The conservatism already built into the mixing zone and effluent limitations, the nature of the statistical description of the nutrient loadings, and the costs involved should be considered in specifying the sampling frequency. The rationale for sampling every day does not provide significant additional environmental protection, and may actually be less conservative than the weighted average approach previously suggested by the canneries.

We believe a weighted average procedure for production and non-production loadings would be sufficient to provide adequate protection of water quality standards. Such an approach would permit the canneries to account for lower loadings on nonproduction days at a reasonable increased sampling cost while at the same time maintaining the conservative approach to permitted nutrient loading levels desired by EPA. The canneries request that the sampling option for counting non-production day loadings be specified on a weighted average basis. A sampling schedule for this option of either a percentage of nonproduction days or all nonproduction days combined with the twice per week production day sampling is requested.

Pat

Copy to N, Mike

**CHM HILL**

**FAX TRANSMITTAL REQUEST FORM  
FOR IMMEDIATE DELIVERY**

**DATE:** 22 April 1992

**PROJECT NUMBER:** PDX30702.PA.NP

**FAX OPERATOR:** \_\_\_\_\_

**TIME SENT:** \_\_\_\_\_ ☐ AM ☐ PM

**TO:** Pat Young and Norman Lovelace **OFFICE:**

**FIRM NAME:** USEPA

**CITY:** San Francisco

**STATE:** CA

**COUNTRY:** USA

**Fax Phone Number:** 415-744-1604

**Verification Phone Number:** 7441591

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**From:** Steve Costa

**Office:** SFO

**Employee No.:** 5932

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**REMARKS:**

Pat,

FYI: material sent to Doug Liden re: NPDES Draft Permits. Please copy Norman Lovelace. Give me a call if you have any questions

Thanks, Steve

**Date Fax Received:** \_\_\_\_\_ **Time:** \_\_\_\_\_ ☐  
AM ☐ PM



22 April 1992

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Permits Issuance Section [W-5-1]  
United States Environmental Protection Agency  
Region IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Attention: Mr. Terry Oda  
Mr. Doug Liden

Subject: Draft NPDES Permits for Pago Pago Joint Cannery Outfall  
(In Reply to W-5-1)

Comments on the Draft NPDES permits for StarKist Samoa, Inc and VCS Samoa Packing Company are presented in the attached memorandum. CH2M HILL reviewed the draft permits as the consultant to both canneries. The comments on the draft permits are presented jointly by both canneries. If you have any questions on the attached material or need any additional information concerning the work performed by CH2M HILL for the canneries, please call me at your convenience.

Sincerely,

CH2M HILL

Steven L. Costa  
Project Manager

attachment: Memorandum, Costa to Liden, 22 April 1992

cc: Pat Young/USEPA  
Sheila Wiegman/ASEPA  
Norman Wei/StarKist Seafood  
James Cox/Van Camp Seafood  
Maurice Callaghan/StarKist Samoa  
Michael Macready/VCS Samoa Packing

CH2M HILL

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**Monitoring Requirements for TRC.** The frequency of monitoring listed in the two permits is inconsistent. Based on your response to my phone call of 16 April 1992 we understand that "once/6 months" is correct and both permits should reflect this value.

We understand that the effluent limitation on TRC applies at the discharge point. TRC concentrations at the available sampling location will not account for the anticipated quenching effects on TRC as it travels through the outfall. We suggest that a procedure for quenching tests to estimate the actual TRC in the discharge to the harbor be developed and that the results of these tests be used to determine if a problem with compliance with TRC standards exists.

A major problem with TRC is the difficulty of measuring it at low levels, which is compounded by turbidity, organic content, and, for StarKist, high sea water content. We request additional guidance from EPA as to the analytical procedures and instrumentation that will be acceptable. We request that EPA provide a description in the statement of basis, in the response to this comment, or in the permit, of an acceptable method for testing for TRC. The TRC testing should include quenching tests.

*Noted*  
*GOC could grant a variance*

*Method?*  
*Day to check w/Peter*



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*Monitoring Requirements for pH.* In the previous permits granted to the canneries the pH effluent limitation included the condition that:

*The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and no individual excursions from the range of pH values shall exceed 60 minutes.*

The operation of the wastewater treatment facilities is based on monitoring and adjustment. The condition in the previous permits recognized the nature of the operations and allowed some response time to adjust to conditions that may be unforeseen or unavoidable. We request that this condition be retained in the present permit for the same reasons.

*TN and TP Combined Loading.* As described in the Statement of Basis, the canneries were permitted to allocate the combined loadings of TN and TP between themselves, given the total allowable loadings. The canneries would like to maintain an ongoing relationship of this kind where the total allowable loading is the criteria for determining violations of permit conditions. Under such an arrangement there would be no violation unless the total loading for both canneries is exceeded. If the total loading is exceeded then the individual cannery permit limits, as given in the draft permits, would be applied to determine which cannery is in violation. If both canneries exceeded permit limits then both would be in violation.

The discharge is through a single outfall and the mixing zone was based on combined loadings of TN and TP. An arrangement such as described above would not increase efforts for monitoring or enforcement. The total permitted discharge of nutrients would not be changed. The only effect would be to allow the canneries more flexibility. The suggested approach is consistent with the "bubble" concept accepted by EPA in other situations. The canneries request that this concept be applied to the joint cannery outfall permits.

## COMMENTS ON SECTION B. DISCHARGE SPECIFICATIONS

The language of the discharge specifications requires that monitoring done at the indicated sampling stations "shall not reveal" listed items in accordance with the American Samoa Water Quality Standards. Reference is not made to the responsibility of the canneries or the consequences to cannery operations if monitoring does reveal any of the listed items. If monitoring does reveal conditions not in accordance with American Samoa Water Quality Standards, and the canneries operations are not the cause, it is not clear what action will be taken by EPA. Examples that come to mind are effects of

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nonpoint source and streamflow runoff events. Such effects are not under the control or influence of the canneries and would be temporary.

The permit section is titled "Discharge Specifications" and presumably refers to the canneries discharges. However, without any cause and effect considerations the intent of the section is vague. The level of information would be required from the canneries to demonstrate they did not cause a violations of American Samoa Water Quality Standards is not stated. The permits should address the action that EPA and the canneries would be expected to take if the canneries were not the cause of a violation of this section. The canneries request that the language of the permits be changed to indicate that the canneries would be responsible and violations would be possible only if the canneries were found to be responsible for the items listed.

*improve  
specify discharge  
w/ EQC zone  
permit rather  
than ASWQS?*

### COMMENTS ON SECTION C. PROTECTED AND PROHIBITED USES

We have the same concerns as expressed for Section B above. The canneries should not be held responsible for another party engaging in prohibited uses, or compromising protected uses, of Pago Pago Harbor. The language should be specific to the canneries discharge through the outfall.

*clarify - permit*

### COMMENTS ON SECTION D. TOXICITY

The canneries request that the language of the first sentence of Part 3 (Toxicity Re-opener) be modified to add the word "materially" as shown below:

*Should any of the monitoring indicate that the discharge causes, has reasonable potential to cause, or contributes materially to an excursion above a water quality criteria, .....*

### COMMENTS ON SECTION E. RECEIVING WATER QUALITY MONITORING PROGRAM

The intent of the monitoring program is to assess the impact of the canneries discharge on Pago Pago Harbor and to provide a means of verifying that water quality standards are being met. We understand the reason for the extent and location of the stations in the past. However, in the future we feel that only those stations at the edge of the mixing zone will be required. We feel that, if no problems are observed, the number of

*No*



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stations can be greatly reduced after the first year of monitoring and the intent of the program can still be met.

If water quality standards are being met throughout the harbor then only those stations in and at the edge of the mixing zone are required to monitor the compliance of the canneries discharge with permit conditions. The canneries request that the permit indicate the possible modification or monitoring stations, with appropriate review, after the first year of monitoring.

## COMMENTS ON SECTION F. DYE OR TRACER STUDIES

The requirement is to perform dye or tracer studies during the two oceanographic seasons. Therefore, the requirement to perform the first study within one month after approval of the study plan may not reflect the most appropriate timing. We suggest that the dates for the studies be determined during development of the study plans. *2 months* *sh*

Based on the results of the first study it may be found that a second study would not be necessary. This could be because of acceptable plume model verification, verification of the conservatism built into the mixing zone and diffuser design criteria, or other conclusions from the first study. We suggest that the requirement of the second study be contingent on an assessment of the results of the first study. *?*

## COMMENTS ON SECTION G. SEDIMENT MONITORING

We do not believe that samples are required yearly to provide an understanding of sediment character changes in either the inner or the outer harbor. We suggest that the results of the first two years of monitoring be assessed. At that time the necessity of annual collections can be made. This could be handled by requiring an approved study plan for additional collections after the first two years with the sampling times to be specified in that plan. *sh*

## COMMENTS ON SECTION H. EUTROPHICATION STUDY

We understand the rationale of the study but feel that the requirement regarding consideration of "phytoplankton species" at the end of the second sentence is vague. We do not believe that the intent is to construct response curves for individual species, but rather to look at the response of the existing phytoplankton communities in the harbor to nutrient loads. *Sheila?* *sh*

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### COMMENTS ON SECTION I. CORAL REEF SURVEY

The requirement specifies both annual and biannual surveys. We understand that surveys every two years is the intended requirement. However, we feel that surveys should be less frequent to detect meaningful differences. We suggest that the timing of surveys be based on results of previous surveys. The first survey would be done as stated and the following survey would be done at a time, specified in a revised study plan, determined after review of the results of the first survey.

No  
→

### COMMENTS ON SECTION J. VERIFICATION OF MODEL PREDICTIONS

The canneries wish to provide the information requested as efficiently as possible. Some formal coordination is probably required to do this. We suggest that a study plan be required and approved prior to doing the modeling and model verification. This will provide a basis on which the adequacy of the work done can be judged.

OK